



The Economic Value of the University of Northern Iowa

THE UNIVERSITY OF NORTHERN IOWA (UNI) creates value in many ways.

The university plays a key role in helping students increase their employability and achieve their individual potential. The university facilitates new research supports innovation and economic development, and also draws visitors and students to the state, generating new dollars and opportunities for Iowa. UNI outreach programs is actively engaged in providing research-based education and information to improve lives of Iowans and grow state businesses. UNI provides students with the education, training, and skills they need to have fulfilling and prosperous careers. Its student and employee volunteers support the state economy through the output and employment generated by state businesses and organizations.

Furthermore, UNI is a place for students to meet new people, increase their self-confidence, and promote their overall health and well-being.

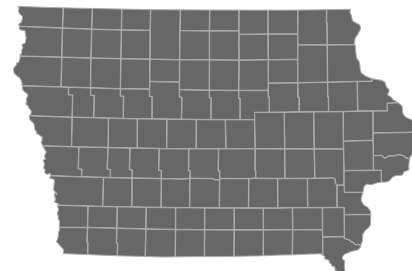
UNI influences both the lives of its students and the state economy. The university supports a variety of industries in Iowa, serves state businesses, and benefits society as a whole in Iowa from an expanded economy and improved quality of life. Additionally, the benefits created by UNI extend to the state and local government through increased tax revenues and public sector savings.

This study measures the economic impacts created by UNI on the business community and the benefits the university generates in return for the investments made by its key stakeholder groups—students, taxpayers, and society. The following two analyses are presented:

Economic impact analysis

Investment analysis

All results reflect employee, student, and financial data, provided by the university, for fiscal year (FY) 2021-22. Impacts on the Iowa economy are reported under the economic impact analysis and are measured in terms of added income. The returns on investment to students, taxpayers, and society in Iowa are reported under the investment analysis.



IOWA

UNI influences both the **lives of its students** and the **state economy**.



Economic impact analysis



UNI promotes economic growth in Iowa through its direct expenditures and the resulting expenditures of visitors, students, and state businesses. The university serves as an employer and buyer of goods and services for its day-to-day, construction, and research operations. UNI's outreach programs help state and local businesses and organizations succeed. Numerous spin-off companies have formed as a result of programs and knowledge at UNI. The university's reputation and activities attract visitors and students from outside Iowa, whose expenditures benefit state vendors. UNI encourages its students and employees to volunteer in the community, helping businesses and organizations grow. In addition, UNI is one of the largest sources of higher education to Iowa residents and a supplier of trained workers to state industries, enhancing overall productivity in the state workforce.

Operations spending impact



UNI adds economic value to Iowa as an employer of state residents and a large-scale buyer of goods and services. In FY 2021-22, the university employed 3,705 full-time and part-time faculty and staff (including graduate assistants and student employees but excluding research employees), 97% of whom lived in Iowa. Total payroll at UNI was \$159 million¹ (excluding payroll from research employees), much of which was spent in the state for household and living expenses, including groceries, mortgage and rent payments, and dining out.. In addition, the university spent \$72.6 million on day-to-day expenses related to facilities, supplies, and professional services (excluding construction and research expenditures).

UNI's day-to-day operations spending added \$176.1 million in income to the state during the analysis year. This figure represents the university's payroll, the multiplier effects generated by the in-state spending of the university and its employees, and a downward adjustment to account for funding that the university received from state sources. The \$176.1 million in added income is equivalent to supporting 3,862 jobs in the state.

Construction spending impact



UNI invests in construction each year to maintain its facilities, create additional capacities, and meet its growing educational demands. While the amount varies from year to year, these quick infusions of income and jobs have a substantial impact on the state economy. In FY 2021-22, UNI's construction spending generated \$5.2 million in added income, which is equivalent to supporting 72 jobs.

¹ Includes royalty payments to inventors related to UNI who still live in Iowa.



Research spending impact



Research activities impact the economy by employing people and requiring the purchase of equipment and other supplies and services. Over the last four years, UNI received 44 invention disclosures, filed eight new patent applications, and produced six licenses.

In FY 2020-21, the UNI spent \$1.9 million on payroll to support research activities. This, along with \$725 thousand in other research spending,² created a net total of \$2.9 million in added income for the state economy. This added income is equivalent to supporting 56 jobs. Note that at the time of this study, FY 2021-22 research expenditure data were being verified, so FY 2020-21 research expenditure data were used as the reference. Actual FY 2021-22 research awards are equal to or higher than FY 2020-21.

UNI research developments

Fiscal year	Inventions	Patents	Licenses
2018-19	11	2	1
2019-20	10	2	2
2020-21	11	2	1
2021-22	12	2	2
Total	44	8	6

Source: UNI.

Foundry 4.0 Center—Industry 4.0 adoption for defense manufacturing

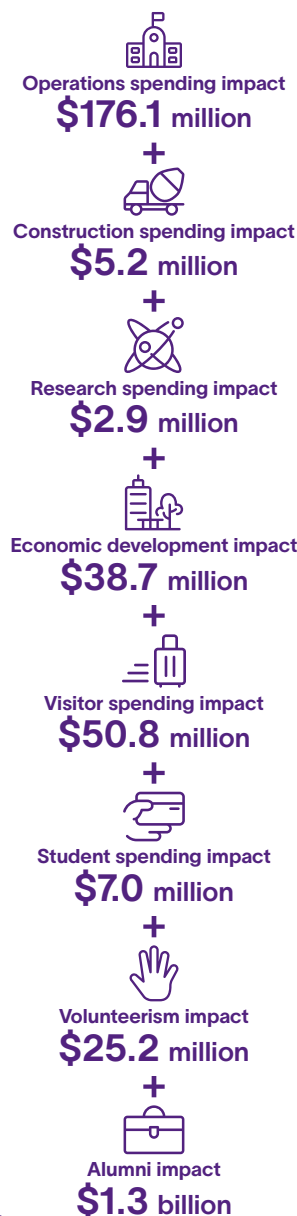
A new partnership between the University of Northern Iowa, Youngstown State University (YSU) with support from the National Center for Defense Manufacturing and Machining (NCDMM) will leverage \$10 million in first-year funding to increase the number of small-to-midsize foundries using advanced technologies, bolster critical areas of the defense manufacturing supply chain, and prepare the future workforce. The partnership aims to provide American-based foundries with the competitive lead in technology while optimizing productivity, output and product quality, catapulting them forward. These innovations create opportunities to build a dynamic digital ecosystem, involving advantages like cost reduction, shortened deadlines, enhanced quality and improved customer satisfaction.

Value of outreach programs



UNI outreach activities strengthen communities and their local economies by enhancing leadership structures, broadening engagement, teaching best practices, and providing hands-on assistance. UNI's Business and Community Services (BCS) consists of 13 outreach programs within a single division that deliver tailored

Impacts created by UNI in FY 2021-22*



Total economic impact
\$1.6 billion

OR

Jobs supported
25,918

* This table excludes the positive impacts of UNI's outreach activities.

² Excludes indirect costs because indirect costs are not necessarily spent during the analysis year.



outreach services in all 99 counties across Iowa. BSC served 3,750 unique clients in FY 2021-22. For example, BCS helped companies improve their hiring process and train employees. It also aided economic developers with retention and expansion programming. Due to the specific nature of these outreach program activities, Light-cast does not attempt to measure an impact. With that said, the value UNI outreach programs for state and local communities should be acknowledged.

Economic development impact



UNI creates an exceptional environment that fosters innovation and entrepreneurship, evidenced by the number of UNI spin-off companies related to the university and companies that have grown in the state. Spin-off companies are companies created and fostered by faculty, students, or alumni as a result of their experience and knowledge acquired at UNI. In addition, companies that benefited from the UNI's Small Business Development Center, John Pappajohn Entrepreneurial Center, and Advance Iowa are included in the analysis as spin-off companies. In FY 2021-22, UNI spin-off companies added \$38.7 million in income to the Iowa economy, which is equivalent to supporting 664 jobs.³

UNI John Pappajohn Entrepreneurial Center (JPEC)—research underway on Black Capital Project

Over the last few years, JPEC innovators saw a growing problem in the headlines and in their own lives: Income inequality in the Cedar Valley was growing. They partnered with 24/7BLAC to launch two programs to close the gap. The first is facilitated by 24/7BLAC and called the Black Business Entrepreneurial Accelerator (BBEA), which helps early-stage ventures owned by Black entrepreneurs; 40 entrepreneurs have graduated to date. The second is the Experiment 529 workshop series facilitated by the JPEC, in which UNI students tutor Black business owners on a variety of essential business tools like website development, e-commerce, sales funnels and more; 100 students have supported 35 entrepreneurs to date. Beyond these two initiatives, the JPEC is underway with the Black Capital Study, which looks into six categories of capital impact that will inform the continued work the JPEC and partners do to close gaps for Black entrepreneurs in the Cedar Valley.

Visitor spending impact



Hundreds of thousands of visitors from outside the state were attracted to UNI during the analysis year to attend commencement, sports events, and other activities sponsored by the university. While in the state, visitors spent money for lodging, food, transportation, and other personal expenses. The off-campus expenditures of the university's out-of-state visitors generated a net impact of \$50.8 million in added income for the state economy in FY 2021-22. This \$50.8 million in added income is equivalent to supporting 1,203 jobs.

³ To maintain an acceptable level of data reliability, this impact is limited to those companies that were created or supported by UNI after FY 2011-12 and were still active in Iowa in FY 2021-22. This impact includes the positive effects UNI's Small Business Development Center, John Pappajohn Entrepreneurial Center, and Advance Iowa have on businesses within Iowa.



Student spending impact



Around 12% of students attending UNI originated from outside the state in FY 2021-22, and some of these students relocated to Iowa to attend UNI. These students may not have come to the state if the university did not exist. In addition, some in-state students, referred to as retained students, would have left Iowa if not for the existence of UNI. While attending the university, these relocated and retained students spent money on groceries, accommodation, transportation, and other household expenses. This spending generated \$7 million in added income for the state economy in FY 2021-22, which supported 137 jobs in Iowa.

Volunteerism impact



UNI encourages its students and employees to volunteer in Iowa, where they can work with businesses and organizations to help meet their goals. The work of these student and employee volunteers allows businesses and organizations to grow, increasing their output and impacting the economy at large. Using the value per volunteer hour for Iowa as provided by the Independent Sector,⁴ the work of UNI student and employee volunteers is equivalent to \$13 million in earnings. In terms of actual impact to the Iowa economy, UNI student and employee volunteers generated an impact of \$25.2 million in added income for the state in FY 2021-22, equivalent to supporting 1,019 jobs.⁵

Annual Back Packin' the Dome day of service

A thousand volunteers from around the Cedar Valley, including UNI students, filled the UNI-Dome's field on Martin Luther King Jr. Day to pack backpacks to serve food-insecure children in Northeast Iowa during the annual Back Packin' the Dome event.

In three 90-minute shifts, packing nearly 48,000 backpacks of nutritious food was completed. This supports Feeding America's local division of the Backpack Program which ensures Northeast Iowa children enrolled in 145 schools have plenty of nutritious food to eat on weekends and times they may not be able to rely on school meal programs.

The annual day of service is a partnership between UNI, the Office of Community Engagement, Panther Pantry (UNI's food bank for students), and AmeriCorps. All these organizations come together to support the work started by the Volunteer Center of Cedar Valley and the Northeast Iowa Food Bank.

⁴ By state value per volunteer hour was provided by Independent Sector (see https://independentsector.org/resource/vovt_details/).

⁵ The impact of volunteerism is grossly undercounted because the number of volunteer hours was self-reported to UNI and only includes a small sample of UNI student and employee volunteers.



Alumni impact



The education and training UNI provides for state residents has the greatest impact. Since its establishment, students have studied at UNI and entered the state workforce with greater knowledge and new skills. Today, thousands of former UNI students are employed in Iowa. As a result of their education from UNI, the students receive higher earnings and increase the productivity of the businesses that employ them. In FY 2021-22, UNI alumni generated \$1.3 billion in added income for the state economy, which is equivalent to supporting 18,906 jobs.

Total impact

UNI added \$1.6 billion in income to the Iowa economy during FY 2021-22, equal to the sum of the operations, construction, and research spending impacts; the economic development impact; the visitor and student spending impacts; the volunteerism impact; and the alumni impact. This \$1.6 billion impact does not include the value that UNI's outreach activities are adding to the state and local communities. For context, the \$1.6 billion impact was equal to approximately 0.7% of the total gross state product (GSP) of Iowa. This contribution that the university provided on its own is nearly half the size of the entire Utilities industry in the state.

UNI's total impact can also be expressed in terms of jobs supported. The \$1.6 billion impact supported 25,918 state jobs, using the jobs-to-sales ratios specific to each industry in the state. This means that one out of every 78 jobs in Iowa is supported by the activities of UNI and its students. In addition, the \$1.6 billion, or 25,918 supported jobs, stemmed from different industry sectors. Among non-education industry sectors, UNI's activities and alumni in the Health Care & Social Assistance industry sector supported 2,191 jobs in FY 2021-22. If the university did not exist, these impacts would not have been generated in Iowa.

UNI impacts by industry (jobs supported)



2,936

Other Services (except
Public Administration)



2,191

Health Care & Social Assistance



1,642

Arts, Entertainment, & Recreation



1,271

Professional & Technical Services



1,146

Retail Trade

One out of every 78 jobs in Iowa
is supported by the activities of UNI
and its students.



Investment analysis



An investment analysis evaluates the costs associated with a proposed venture against its expected benefits. If the benefits outweigh the costs, then the investment is financially worthwhile. The analysis presented here considers UNI as an investment from the perspectives of students, taxpayers, and society in Iowa.

Student perspective



In Fall 2021, UNI served more than 9,231 students. Expanding to the entire FY 2021-22, UNI served more than 10,500 students. In order to attend the university, the students paid for tuition, fees, books, and supplies. They also took out loans and will incur interest on those loans. Additionally, students gave up money they would have otherwise earned had they been working instead of attending college. The total investment made by UNI's students in FY 2021-22 amounted to a present value of \$102.7 million, equal to \$49.1 million in out-of-pocket expenses (including future principal and interest on student loans) and \$53.6 million in forgone time and money.

In return for their investment, UNI's students will receive a stream of higher future earnings that will continue to grow throughout their working lives. For example, the average UNI bachelor's degree graduate from FY 2021-22 will see annual earnings that are \$22,700 higher than a person with a high school diploma or equivalent working in Iowa. Over a working lifetime, the benefits of the bachelor's degree over a high school diploma will amount to an undiscounted value of \$976.1 thousand in higher earnings per graduate. The present value of the cumulative higher future earnings that UNI's FY 2021-22 students will receive over their working careers is \$744.5 million.

The students' benefit-cost ratio is 7.2. In other words, for every dollar students invest in UNI in the form of out-of-pocket expenses and forgone time and money, they will receive a cumulative value of \$7.20 in higher future earnings. Annually, the students' investment in UNI has an average annual internal rate of return of 21.2%, which is impressive compared to the U.S. stock market's 30-year average rate of return of 10.5%.

Students see a high rate of return for their investment in UNI



Average annual return for UNI students

21.2%



Stock market 30-year average annual return

10.5%

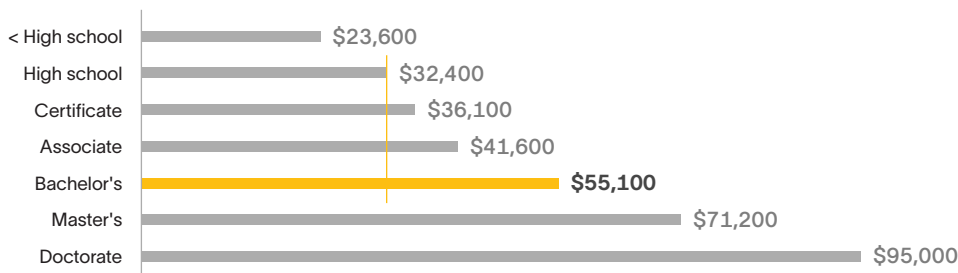


Interest earned on savings account (National Rate Cap)

0.8%

Source: Forbes' S&P 500, 1992-2021. FDIC.gov, 2-2022.

The average bachelor's degree graduate from UNI will see an increase in earnings of **\$22,700** each year compared to a person with a high school diploma or equivalent working in Iowa.



Source: Lightcast employment data.



Taxpayer perspective



UNI generates more in tax revenue than it receives. These benefits to taxpayers consist primarily of taxes that the state and local government will collect from the added revenue created in the state. As UNI students will earn more, they will make higher tax payments throughout their working lives. Students' employers will also make higher tax payments as they increase their output and purchases of goods and services. By the end of the FY 2021-22 students' working lives, the state and local government will have collected a present value of \$197.5 million in added taxes.

Benefits to taxpayers will also consist of savings generated by the improved lifestyles of UNI students and the corresponding reduced government services. Education is statistically correlated with a variety of lifestyle changes. The education that UNI students receive will generate savings in three main categories: 1) healthcare, 2) justice system, and 3) income assistance. Improved health will lower students' demand for national health care services. In addition, costs related to the justice system will decrease. UNI students will be more employable, so their reduced demand for income assistance such as welfare and unemployment benefits will benefit taxpayers. For a list of study references, contact the university for a copy of the main report. Altogether, the present value of the benefits associated with an education from UNI will generate \$39.7 million in savings to state and local taxpayers.

Total taxpayer benefits amount to \$237.2 million, the present value sum of the added taxes and public sector savings. Taxpayer costs are \$115.8 million, equal to the amount of state government funding UNI received in FY 2021-22. These benefits and costs yield a benefit-cost ratio of 2.0. This means that for every dollar of public money invested in UNI in FY 2021-22, taxpayers will receive a cumulative present value of \$2.00 over the course of the students' working lives. The average annual internal rate of return for taxpayers is 3.6%, which compares favorably to other long-term investments in the public and private sectors.

For every dollar of public money invested in UNI, taxpayers will receive a cumulative value of **\$2.00** over the course of the students' working lives.

Social perspective



Society as a whole in Iowa benefits from the presence of UNI in two major ways. Primarily, society benefits from an increased economic base in the state. This is attributed to the added income from students' increased lifetime earnings (added student income), added income from the university's activities, and increased business output (added business income), which raise economic prosperity in Iowa.

Benefits to society also consist of the savings generated by the improved lifestyles of UNI students. As discussed in the previous section, education is statistically correlated with a variety of lifestyle changes that generate social savings. Note that these costs are avoided by the consumers but are distinct from the costs avoided by the taxpayers

outlined above. Healthcare savings include avoided medical costs associated with smoking, alcohol dependence, obesity, drug abuse, and depression. Justice system savings include avoided costs to the government and society due to less judicial activity. Income assistance savings include reduced welfare and unemployment claims. For a list of study references, contact the university for a copy of the main report.

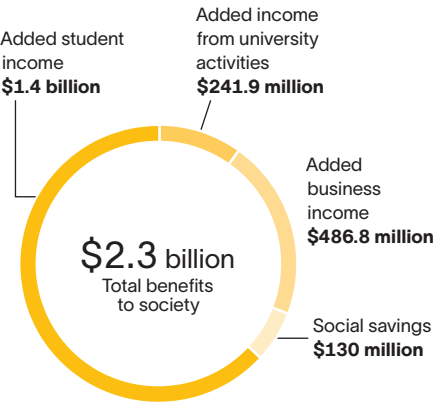
Altogether, the social benefits of UNI equal a present value of \$2.3 billion. These benefits include \$1.4 billion in added student income, \$486.8 million in added business income, \$241.9 million in added income from university activities, as well as \$130 million in social savings related to health, the justice system, and income assistance in Iowa. People in Iowa invested a present value total of \$317.3 million in UNI in FY 2021-22. The cost includes all the university and student costs.

The benefit-cost ratio for society is 7.3, equal to the \$2.3 billion in benefits divided by the \$317.3 million in costs. In other words, for every dollar invested in UNI, people in Iowa will receive a cumulative value of \$7.30 in benefits. The benefits of this investment will occur for as long as UNI’s FY 2021-22 students remain employed in the state workforce.

Summary of investment analysis results

The results of the analysis demonstrate that UNI is a strong investment for all three major stakeholder groups—students, taxpayers, and society. As shown, students receive a great return for their investments in an education from UNI. At the same time, taxpayers’ investment in UNI returns more to government budgets than it costs and creates a wide range of social benefits throughout Iowa.

Social benefits in Iowa from UNI



Source: Lightcast impact model.

Student perspective

Present value benefits
\$744.5 million

Present value costs
\$102.7 million

Net present value
\$641.7 million

Benefit-cost ratio	Rate of return
7.2	21.2%

Taxpayer perspective

Present value benefits
\$237.2 million

Present value costs
\$115.8 million

Net present value
\$121.5 million

Benefit-cost ratio	Rate of return
2.0	3.6%

Social perspective

Present value benefits
\$2.3 billion

Present value costs
\$0.3 billion

Net present value
\$2.0 billion

Benefit-cost ratio	Rate of return
7.3	n/a*

* The rate of return is not reported for the social perspective because the beneficiaries are not necessarily the same as the original investors.

Conclusion

The results of this study demonstrate that UNI creates value from multiple perspectives. The university benefits state businesses by increasing consumer spending in the state and supplying a steady flow of qualified, trained workers to the workforce. UNI enriches the lives of students by raising their lifetime earnings and helping them achieve their individual potential. The university benefits state and local taxpayers through increased tax receipts and a reduced demand for government-supported social services. Finally, UNI benefits society as a whole in Iowa by creating a more prosperous economy and generating a variety of savings through the improved lifestyles of students.



About the study

Data and assumptions used in the study are based on several sources, including the FY 2021-22 academic and financial reports from UNI, industry and employment data from the U.S. Bureau of Labor Statistics and U.S. Census Bureau, outputs of Lightcast's Multi-Regional Social Accounting Matrix model, and a variety of studies and surveys relating education to social behavior. The study applies a conservative methodology and follows standard practice using only the most recognized indicators of economic impact and investment effectiveness. For a full description of the data and approach used in the study, please contact the university for a copy of the main report.

The results of this study demonstrate that UNI creates value from **multiple perspectives**.



Lightcast provides colleges and universities with labor market data that help create better outcomes for students, businesses, and communities. Our data, which cover more than 99% of the U.S. workforce, are compiled from a wide variety of government sources, job postings, and online profiles and résumés. Hundreds of institutions use Lightcast to align programs with regional needs, drive enrollment, connect students with in-demand careers, track their alumni's employment outcomes, and demonstrate their institution's economic impact on their region. Visit lightcast.io/solutions/education to learn more or connect with us.

